

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Maria-Luisa Macccecchini and Xue-Feng Pei

Serial No.: 10/021,177

Art Unit: 1614

Filed: October 30, 2001

Examiner: W. R. Jarvis

For: *METHOD FOR MODULATION, STIMULATION, AND INHIBITION OF
GLUTAMATE REUPTAKE*

Assistant Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO ELECTION OF SPECIES REQUIREMENT

Sir:

In response to the Election of Species Requirement mailed on January 27, 2003, please consider the following remarks. Submitted with this Response to Election of Species requirement is a Petition for Extension of Time, along with the required \$55.00 fee for a small entity, to extend the period for filing response one month, to and including March 27, 2003.

It is believed that no additional fee is required with this submission. However, should an additional fee be required, the Commissioner is hereby authorized to charge the fee to Deposit Account No. 50-1868.

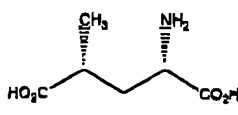
Election of Species Requirement

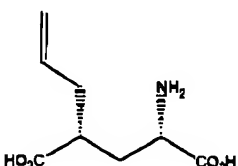
The Examiner required the applicants to elect a single species for each of claims 6-9. The applicants elect the following species with traverse for each of claims 6-9:

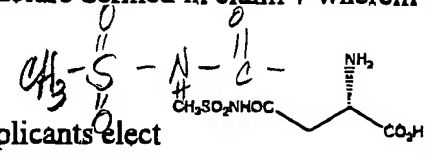
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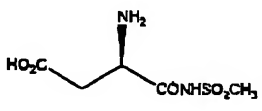
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For claim 6, the applicants elect  (SYM 2081), which corresponds to the structure defined therein wherein R¹, R², R³, R⁴, R⁵ and R⁶ are H. 561

For claim 7, the applicants elect  (SYM 2083), which corresponds to the first structure defined in claim 7 wherein R is H.

For claim 8, the applicants elect  (SYM 2062), which corresponds to the structure defined in claim 8 wherein R¹, R², R³, R⁴, R⁵ and R⁷ are H, R⁶ is CH₃SO₂N-, and n is 0. 562

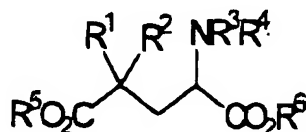
For claim 9, the applicants elect  (SYM 2051), which corresponds to the structure defined in claim 9 wherein R¹, R², R³, R⁴, R⁵ and R⁷ are H, R⁶ is CH₃SO₂N-, and n is 0.

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RESPONSE TO ELECTION OF SPECIES REQUIREMENT**Appendix: Claims as Pending**

1. A method of treating a disease, condition, or disorder involving glutamate levels, the method comprising administering a transporter compound to an individual exhibiting symptoms of a disease, condition, or disorder involving transport of, or activation by, excitatory amino acids.
2. The method of claim 1 wherein the transporter compound is an agonist of a glutamate receptor.
3. The method of claim 1 wherein the transporter compound is an antagonist of a glutamate receptor.
4. The method of claim 1 wherein the transporter compound is a ligand of a glutamate receptor.
5. The method of claim 1 wherein the transporter compound selectively binds to one type of glutamate transporter.
6. The method of claim 1 wherein the transporter compound has the structure



wherein

 R^1 , R^2 , R^5 and R^6 are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) halogen;

 R^3 and R^4 are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,

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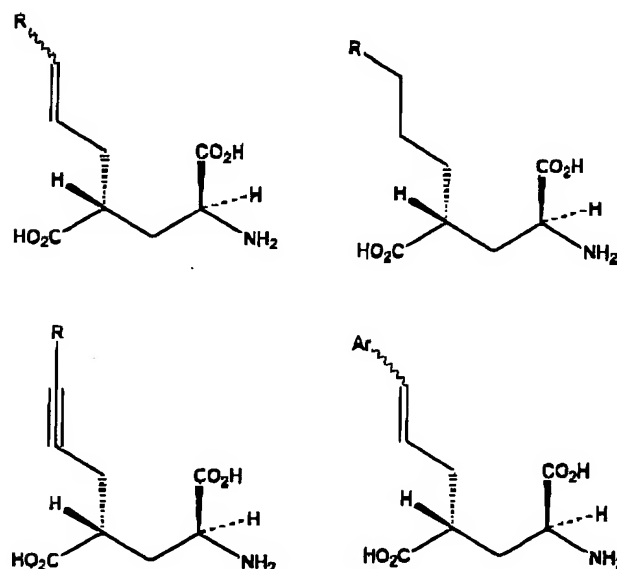
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- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO₂-
- 9) CF₃SO₂-
- 10) PhSO₂-
- 11) HCO-, or
- 12) C3-C6-alkynyl; and

R³ and R⁴ taken together can be -CH₂(CH₂)_nCH₂- wherein n is 0, 1, 2, or 3.

7. The method of claim 1 wherein the transporter compound has the structure



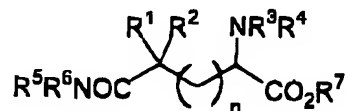
wherein R = H, C1-C6-alkyl, C3-C4-alkenyl, C3-C5-cycloalkyl, C1-C6-alkyl-CO-, C1-C6-alkyl-OCO-, C1-C6-alkyl-NHCO-, HCO-, or C3-C6-alkynyl.

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8. The method of claim 1 wherein the transporter compound has the structure



wherein

n is an integer selected from the group consisting of 0, 1, 2, and 3;

R^1, R^2, R^5 and R^7 are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) halogen;

R^3 and R^4 are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO₂-
- 9) CF₃SO₂-
- 10) PhSO₂-
- 11) HCO-, or
- 12) C3-C6-alkynyl;

R^3 and R^4 taken together can be $-\text{CH}_2(\text{CH}_2)_m\text{CH}_2-$ wherein m is 0, 1, 2, or 3;

R^6 is independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,

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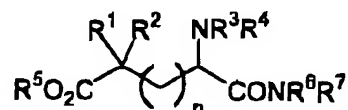
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- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-
- 8) C1-C6-alkyl-SO₂-
- 9) CF₃SO₂-
- 10) PhSO₂-
- 11) HCO-, or
- 12) C3-C6-alkynyl; and

R⁵ and R⁶ taken together can be -CH₂(CH₂)_kCH₂- wherein k is 0, 1, 2, or 3.

9. The method of claim 1 wherein the transporter compound has the structure



wherein

n is an integer selected from the group consisting of 0, 1, 2, and 3;

R^1, R^2, R^5 and R^7 are independently

- 1) C1-C6-alkyl,
- 2) C3-C4-alkenyl,
- 3) C3-C5-cycloalkyl,
- 4) H, or
- 5) halogen;

R^3 and R^4 are independently

- 1) H,
- 2) C1-C6-alkyl,
- 3) C3-C4-alkenyl,
- 4) C3-C5-cycloalkyl,
- 5) C1-C6-alkyl-CO-
- 6) C1-C6-alkyl-OCO-
- 7) C1-C6-alkyl-NHCO-

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RESPONSE TO ELECTION OF SPECIES REQUIREMENT8) C1-C6-alkyl-SO₂-9) CF₃SO₂-10) PhSO₂-

11) HCO-, or

12) C3-C6-alkynyl;

R³ and R⁴ taken together can be -CH₂(CH₂)_mCH₂- wherein m is 0, 1, 2, or

3.

R⁶ is independently

1) H,

2) C1-C6-alkyl,

3) C3-C4-alkenyl,

4) C3-C5-cycloalkyl,

5) C1-C6-alkyl-CO-

6) C1-C6-alkyl-OCO-

7) C1-C6-alkyl-NHCO-

8) C1-C6-alkyl-SO₂-9) CF₃SO₂-10) PhSO₂-

11) HCO-, or

12) C3-C6-alkynyl; and

R⁶ and R⁷ taken together can be -CH₂(CH₂)_kCH₂- wherein k is 0, 1, 2, or 3.

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The applicants honestly solicit the allowance of claims 1-9. A copy of claims as pending are attached as appendix for the Examiner's convenience.

Respectfully submitted,



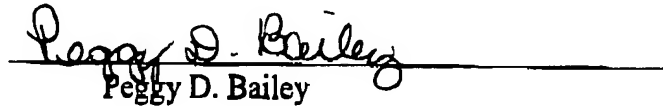
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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper, along with any paper referred to as being attached or enclosed is being facsimile transmitted to the U. S. Patent and Trademark Office on the date shown below,



Peggy D. Bailey

Date: March 26, 2003